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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/960,736	09/24/2001	Hirokazu Yamada	2635-29	4240

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EXAMINER

NGUYEN, DONGHAI D

ART UNIT	PAPER NUMBER
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3729

DATE MAILED: 01/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/960,736

Applicant(s)

YAMADA ET AL.

Examiner

Donghai D. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 13 November 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) 7-12, 19-23 and 2735 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 13-18, 24 and 25 is/are rejected.
- 7) ☒ Claim(s) 26 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 9.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Response to Amendment***

1. The proposed reply filed on November 13, 2003 has been entered as Paper No 9.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-6, 13-18 and 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 4556,475 to Bayha et al. in view of US Patent No. 4,730,389 to Baudino et al..

Regarding claims 1, 13, and 24, Bayha et al. disclose a gas sensor (10) manufacturing method comprising the steps of: preparing an assembly which has a length and includes a housing (casing 11) which has a length made up of a first end portion, a second end portion, and a flange (12) between the first and second end portions, a cover (shell 17 and cap sleeve 74) which is made up of a small-diameter portion, a large-diameter portion, and a shoulder (area at end face 72) formed between the small-diameter portion and the large-diameter portion (Fig. 1), a first insulation porcelain (41) disposed in the large-diameter portion of the cover in contact with the shoulder through an elastic member (45), a second insulation porcelain (40) disposed in the housing in contact of an end (48) thereof with an end (47) of the first insulation porcelain in alignment with each other and a laminated sensor element (30/35) disposed in the second

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insulation porcelain; pressing the cover against the housing (11) in a lengthwise direction of said assembly to fit an end of the large-diameter portion of the cover on the first end portion of the housing to form an overlap (Col. 3, lines 50-60); tack welding the large-diameter portion of the cover to the first end portion of the housing at the overlap while pressing the cover against the housing (col. 2, lines 21-24 and inference). Bayha et al. do not rotate the assembly and weld the large-diameter portion of the cover to the first end portion of the housing at the overlap while pressing the cover against the housing. However, Baudino et al teach the step rotating the assembly and welding the cover to the housing (figs. 5-6 and col. 4, lines 24-27) for providing a hermetic sealing and preventing any corrosion (Col. 4, lines 30-34). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Bayha et al. to having the steps of rotating the assembly and welding the cover to the housing as taught by Baudino et al for providing a hermetic sealing and preventing any corrosion.

Regarding claims 2, 14, and 24 see col. 3, lines 48-54.

Regarding claims 4-6 and 15-18 also met as set for above.

***Allowable Subject Matter***

4. Claim 26 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

*Response to Arguments*

5. Applicant's arguments filed November 13, 2003 have been fully considered but they are not persuasive.

Regarding claims 1-6, Applicants argue that prior arts of record do not teach or in any way suggest the claimed step of "tack welded the cover to the housing **before** the cover is welded to the housing", but this limitation is not recited in the rejected claims. Furthermore, Bayha et al disclose the cover is fastened, "tack welding" to the housing (Col. 2, lines 21-24).

Regarding claims 13-18 and 24-25 Applicants argue that Bayha does not teach or suggest and does not require tack welding the cover to the housing; however tack welding is not recited in the rejected claims. Applicants also argue that Bayha does not teach or suggest and does not require welding the cover to the housing while pressing the cover; however Bayha and Baudino as a whole discloses this step of welding the cover to the housing while pressing the cover (Baudino's col. 4, lines 20-27 and Bayha's Col. 2, lines 21-24 or col. 3, lines 50-60).

In response to Applicant's arguments against the references individually such as Bayha does not teach or suggest and does not require tack welding the cover to the housing or welding while pressing the cover against the housing, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

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*Conclusion*

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donghai D. Nguyen whose telephone number is (703) 305-7859. The examiner can normally be reached on Monday-Friday (9:00-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter D. Vo can be reached on (703) 308-1789. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1148.

DN



PETER VO  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700